

Dear editor and reviewers:

Thank you very much for your preference on our paper “The impact of parenchyma-preserving surgical methods on treating patients with solid pseudopapillary neoplasms: a retrospective study with a large sample size”. The suggestions from editors and reviewers have greatly improved the quality of our paper. However, some defects still exist in our paper which limit the readability as the reviewer suggested. We have revised the manuscript again according to reviewers’ suggestions to make our paper’s quality meet the publishing standard. Thank you very much for all your helps.

Best regards

Sincerely yours

Dr. Liqi Sun

Reviewer #1: Solid pseudopapillary neoplasm of the pancreas (SPN), which is a rare neoplasm that mainly affects young women, has an excellent prognosis following complete surgical resection. However, the conventional surgical method is associated with a high rate of morbidity and a high rate of long-term endocrine/exocrine insufficiency due to the loss of pancreatic parenchyma. Therefore, the authors emphasize parenchyma-preserving surgical method (PPM) for SPN. This study is very interesting since SPN is a very rare neoplasm, however, the following points are big problem in order to make a conclusion of this study.

(1) In the abstract, the authors do not define parenchyma-preserving surgical methods (PPM) clearly, because PPM differs among surgeons, and furthermore, the tumor location highly influences the surgical method. Additionally, the significance of PPM should be evaluated according to the tumor location, such as pancreatic head and body-tail.

Reply. Thank you for your comment. We have defined the parenchyma-preserving surgical methods in the abstract. The PPM included enucleation and central pancreatectomy.

We agree with the reviewer’s comment that the tumor location highly influences the surgical method in the past. It may be difficult to perform PPM in tumors located in the pancreatic head. However, we perform more and more PPM in tumors located in pancreatic head, especially enucleation. In the study by wang et al. (PMID: 29525465), 38.7% of the patients who underwent enucleation had tumor located in pancreatic head/uncinate. Therefore, the tumor location may not influence the surgical method chose as we think in the past. Moreover, the tumor distribution in our study had no difference between PPM and CM groups. As a result, the tumor location was not set as an independent parameter to be analyzed in our study.

(2) The 33 patients who underwent PPM should be described by dividing enucleation and central pancreatectomy. What number of patients underwent CP or enucleation? The surgical procedures are quite different between the two, and furthermore the indication of enucleation is highly inflicted by the tumor location and/or size. Ideally, the surgical outcomes should be analyzed between PD and CP, because the backgrounds of these procedures may be machetes well.

Reply. In the 33 patients, 13 patients underwent enucleation and 20 patients underwent central pancreatectomy. The detailed data had been added in the result section. Actually, we want to perform subgroup analyses based on their surgical method (CP or enucleation) initially. However, no significant difference was observed in each parameter between CP and enucleation patients. The phenomenon may be due to most parenchyma of pancreas is preserved by the 2 surgical methods. The study may be prolix due to too many negative results included in our study.

Therefore, the subgroup analyses were not included in our study.

Reviewer #2: The paper by Yuqiong Li et al describes that parenchyma-preserving surgical methods (PPMs) in the treatment of SPN patients is safe for preserving the pancreatic exocrine function. It is suggested that PPM is equivalent or more useful than the conventional method for the surgical treatment of SPN patients. This treatise has been reviewed in many patients and has a clear purpose, but may be improved by the following suggestions:

How did you evaluate pancreatic endocrine and exocrine insufficiency?

Reply. The definitions of pancreatic endocrine and exocrine insufficiency had been already in the original manuscript. The detailed definitions are as follow: Endocrine insufficiency was defined as a fasting plasma glucose level > 7.0 mmol/L and/or the need for diet modification, oral medication, or insulin use to control blood. Exocrine insufficiency was defined as symptoms (steatorrhea or weight loss) resolving after pancreatic enzyme supplementation.

Page3, Line8- Was there a difference in the average years of experience of surgeons between the two groups?

Reply. Thank you for the comment from reviewer. The surgeons who were qualified to perform pancreatic surgery in our centers had at least 15 years of operation experience with an average of 100 operations per year. The average years of experience of surgeons was displayed in Table 2 with no difference between PPM and CM groups (19.0 vs 19.5 years, $P=0.85$). The description of surgeon qualification and detailed data of surgeon experience had been added in the manuscript.

Page5, Line25- The frequency of abdominal distension is 6/53, but isn't it 6/62?

Reply. Sorry about the mistake. We have corrected the data to 6/62.

Page6, Line40- Was there a difference between the two groups in each complication?

Reply. The differences between the two groups in each complication were displayed in Table3. The sentence "For each complication, the differences of incidences were not observed" was added in the end of "Short-term complications" section to describe the comment from reviewer.